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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,232	11/12/2003	Kevin Kremeyer	24847-017	3542
7590	08/23/2005		EXAMINER	
MCDERMOTT, WILL & EMERY 600 13th Street, N.W. Washington, DC 20005-3096			SWIATEK, ROBERT P	
			ART UNIT	PAPER NUMBER
			3643	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/705,232	KREMEYER, KEVIN
<b>Examiner</b>	<b>Art Unit</b>	
	Robert P. Swiatek	3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 15 June 2005.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-76 is/are pending in the application.  
4a) Of the above claim(s) 1-28,36-42,50,51 and 67-76 is/are withdrawn from consideration.  
5)  Claim(s) 60-65 is/are allowed.  
6)  Claim(s) 29-35,43-49,52-59 and 66 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11-12-03.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date.       .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other:       .

## DETAILED ACTION

The restriction requirement set forth in the 15 March 2005 Office action is hereby repeated and made final. The inventions listed in the restriction requirement were shown to be separate and distinct; moreover, the nonelected claims—in several instances being of different scope or directed to an invention not recited in US Patent 6,527,221 B1—would require searches outside the ambit of that required for the elected invention. The restriction requirement therefore is believed proper. It is noted that new claims 67-76 are not drawn to the elected invention and thus have been withdrawn from consideration along with claims 1-28, 36-42, 50, 51.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 29-35, 43-49, 52-59, 66 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29, 31-35, 38, 71 of U.S. Patent No. 6,527,221 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims include the steps of emitting energy from a body along an extended path in a fluid, which fluid includes a liquid; heating the

fluid along the path to reduce its density and cause it to expand outwardly from the path; directing the path to be parallel to the direction of the body's passage through the fluid; heating the fluid simultaneously at different points along the path; and forming multiple paths within the fluid.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 52, 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Schoppe (US 3,620,484: Ref. on sheet 1 of Information Disclosure filed 12 November 2003). With respect to Figure 3 of Schoppe, when device 34 ignites the hydrogen gas, heat and light would be emitted along a short linear path from the point of ignition to the body 10; once ignition had commenced, heating of the air adjacent to the path of the burning hydrogen would occur substantially simultaneously along the entire path, with the heated fluid (air) then expanding outwardly from the path. The slipstream would direct the path of the heated air rearwardly and parallel to the direction of travel of the body.

The patent to Saeks et al. (US 6,247,671 B1) has been cited to provide an additional example of an aerodynamic flow control device.

Summary: Claims 1-28, 36-42, 50, 51, 67-76 have been withdrawn; claims 29-35, 43-49, 52-59, 66 have been rejected; claims 60-65 have been allowed.

RPS: ①571/272-6894  
18 August 2005

*Robert P. Swiatek*  
ROBERT P. SWIATEK  
PRIMARY EXAMINER  
ART UNIT 322 3643